# Summary of Autoguider Wye Cables

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BiSON Birmingham Solar-Oscillations Network

TECHNICAL REPORT NO. 363

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2013 December 10

This technical report series is published by:

THE UNIVERSITY OF BIRMINGHAM

**High-Resolution Optical-Spectroscopy Group**

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**Abstract**

Wiring diagrams for the autoguider wye cables used on all five mounts are presented.

## 1 Introduction

The Telescope Wye Cable is used to split the fine and coarse quadrant photodiode signals into two separate branches because they use different connectors on the rear of the Mount Controller. The autoguider telescopes used in our stations are mostly wired differently. The telescope wye cable is adjusted at each station to compensate.

This document details the autoguider wye cable required for the guider head on all five mounts.

The mount controller for Las Campanas [1] was the first to be installed in 2011 May [2]. Following this installation a number of modifications were made [3] and updated units installed in Carnarvon [4], Narrabri [5], and Sutherland [6].

### 1.1 Telescope Wye Cables

Figure 1 shows the telescope wye cable in Birmingham. Figure 2 shows the telescope wye cable in Las Campanas. Figure 3 shows the telescope wye cable in Carnarvon, Narrabri, and Sutherland.

## References

[1] Ian Barnes and Brek A. Miller. The Mount Controller: A digital autoguider for Las Campanas. *BISON Technical Report Series,* Number 344, High-Resolution Optical-Spectroscopy Group, Birmingham, United Kingdom, May 2011.

[2] Brek A. Miller. The installation of a digital autoguider in Las Campanas in 2011 March. *BISON Technical Report Series,* Number 343, High-Resolution Optical-Spectroscopy Group, Birmingham, United Kingdom, May 2011.

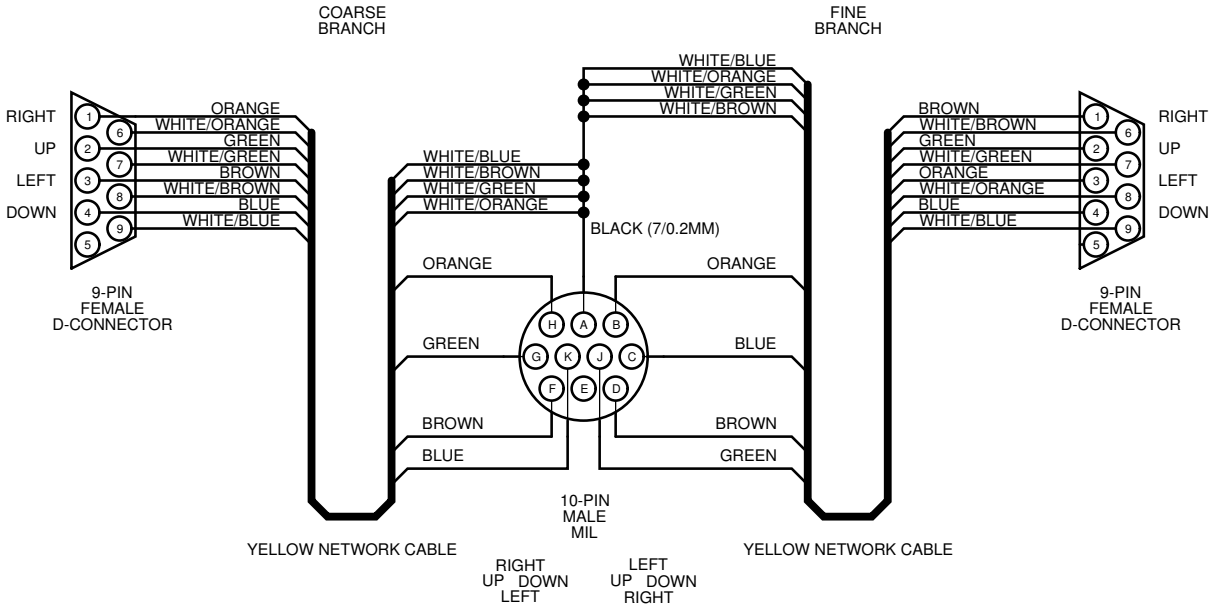


**Figure 1**: The telescope wye cable in Birmingham.

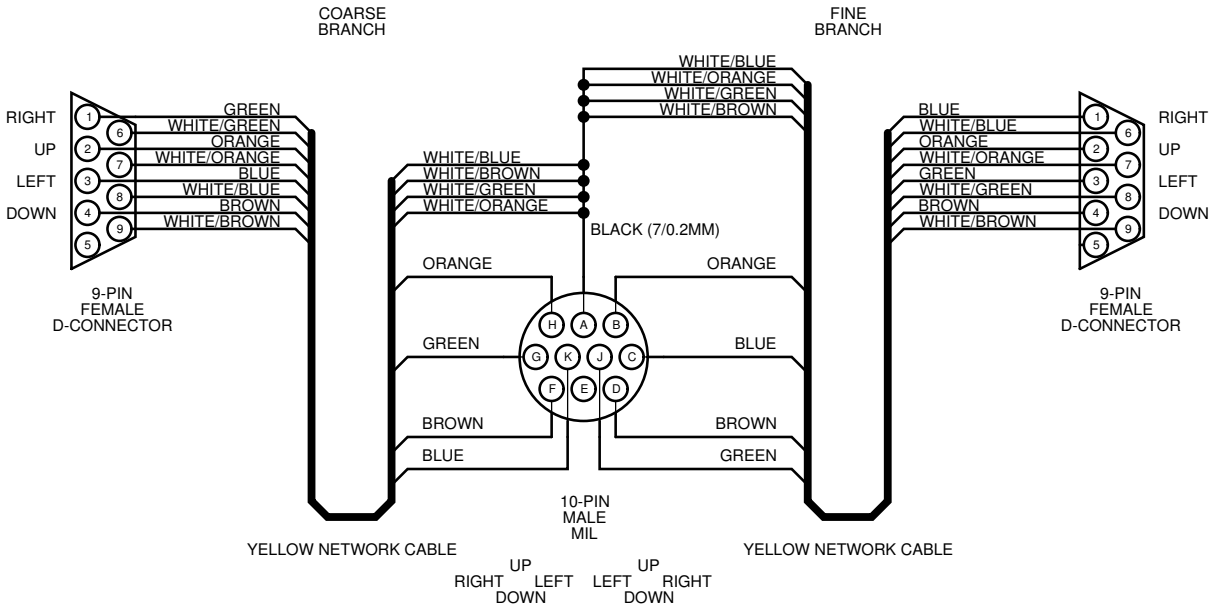


**Figure 2**: The telescope wye cable in Las Campanas.

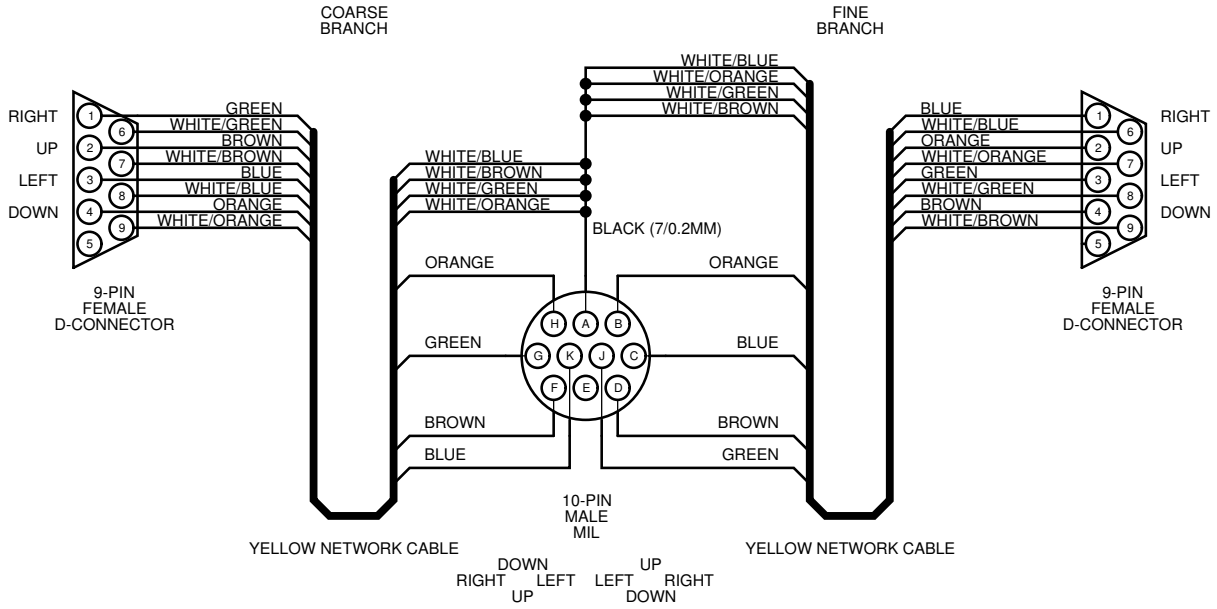


**Figure 3**: The telescope wye cable in Carnarvon, Narrabri, and Sutherland.


[3] Ian Barnes and Brek A. Miller. The Mount Controller: A digital autoguider for Carnarvon. *BISON Technical Report Series,* Number 349, High-Resolution Optical-Spectroscopy Group, Birmingham, United Kingdom, January 2012.

[4] Steven J. Hale and Brek A. Miller. The installation of a digital autoguider in Carnarvon in 2011 September. *BISON Technical Report Series,* Number 348, High-Resolution Optical-Spectroscopy Group, Birmingham, United Kingdom, January 2012.

[5] Steven J. Hale and Guy R. Davies. The installation of a digital autoguider and tiger counters in Narrabri in 2013 April. *BISON Technical Report Series,* Number 360, High-Resolution Optical-Spectroscopy Group, Birmingham, United Kingdom, May 2013.

[6] Steven J. Hale. The installation of a digital autoguider in Sutherland in 2013 November. *BISON Technical Report Series,* Number 362, High-Resolution Optical-Spectroscopy Group, Birmingham, United Kingdom, December 2013.